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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,977	03/25/2004	Jian Qin	15105.1	9633

23556 7590 03/23/2007  
KIMBERLY-CLARK WORLDWIDE, INC.  
401 NORTH LAKE STREET  
NEENAH, WI 54956

EXAMINER
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STEPHENS, JACQUELINE F

ART UNIT	PAPER NUMBER
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3761

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/810,977	QIN ET AL.	
	Examiner	Art Unit	
	Jacqueline F. Stephens	3761	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 12/11/06 have been fully considered but they are not persuasive.

Applicant repeats the argument that Bashaw teaches an aqueous surfactant solution which has a water content of between 95% and 99.998% unlike the surfactant solution of Applicant's invention, ( which contains between only 0.5% and 30% water by weight of the solvent). Not only is applicant is relying on features which are not recited in the rejected claims, but the claims previously recited an aqueous surfactant solution. As previously argued by the examiner, the surfactant solution of the present invention can contain up to 30% water and given the plain meaning of aqueous, the solution being made with water is an aqueous solution irrespective of the percentage of water in the composition.

Applicant has argued that the superabsorbent material of the present invention has a hydrophobic surface rather than a hydrophilic surface in that the superabsorbent of Bashaw is chopped, which has the effect of exposing additional hydrophilic groups located below the surface of the copolymer, contributing to its hydrophilic nature. Applicant argues the superabsorbent of the present invention is hydrophobic because it is produced in a spinning process and the process results in a different fiber than the fiber resulting from a pulverization process. Applicant has provided a Declaration under 37 CFR 1.132 to demonstrate the differences between a pulverized superabsorbent polymer made by a conventional production process having a fugitive surfactant coating

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and a superabsorbent material made by a spinning process having a permanent surfactant coating. However, the Declaration is insufficient to overcome the rejection of claims 22-26, 27, 29-32, 34, and 35 based upon Bashaw et al. USPN 3989586 in view of Howe USPN 5494611; and claims 28, 33, 36, and 39 based upon Bashaw in view of Howe and further in view of Paul et al. USPN 6217890 as applied under 35 U.S.C. 103(a) as the evidence is not commensurate with the scope of the claims. Although the specification mentions the surface of a SAF is made hydrophobic during the fiber spinning process, a web made according to a spinning process is not claimed. If Applicant intends to prove the materials are different and this causes significant swelling in the Bashaw invention, then the materials should be compared. If Applicant intends to demonstrate the processing of the superabsorbent results in differences in wettability, then the processes should be compared. It is noted some of the dependent claims require specific material for the superabsorbent material and surfactant solutions, were these specific materials considered in the comparison of the closest prior art? Applicant must compare the claimed subject matter with the closest prior art to be effective to rebut a *prima facie* case of obviousness. The declaration evidence refers only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.

***Claim Rejections - 35 USC § 103***

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2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 22-26, 27, 29-32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bashaw et al. USPN 3989586 in view of Howe USPN 5494611.

As to claims 22, 24-26, 34, and 35, Bashaw discloses a permanently wettable superabsorbent material and method of making the absorbent comprising: treating the superabsorbent material with a surfactant solution (col. 2, lines 9-11; col. 4, lines 35-68). Bashaw discloses the crosslinked copolymer is further activated with methanol, dried and processed in fiber form (col. 4, lines 1-21). The surfactant solution includes an amount of water sufficient to solvate the surface of the superabsorbent material but less

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than sufficient to cause significant swelling of the superabsorbent material (col. 4, lines 1-5). Bashaw discloses surfactants (col. 4, lines 35-68) similar to the surfactants taught in the present specification page 6, line 25 through page 7, line 7. In particular, Bashaw discloses cetyl dimethylamine oxide. Howe shows that cetyl dimethylamine oxide is an equivalent structure known in the art of lauryl dimethylamine oxide (Howe col. 4, lines 48-61). Because these two surfactants are art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute cetyl dimethylamine oxide for lauryl dimethylamine oxide, which applicant discloses is a suitable surfactant having the claimed functional groups.

Regarding the Flotation Time procedure and the Surface Tension Test and the examiner's interpretation of the tests and performance characteristics of the instant apparatus claims, because the structure recited in the reference is substantially identical to that of the claims of the instant invention, the test claimed properties or functions are presumed to be obvious.

As to claim 23, Bawash discloses the superabsorbent material is a fibrous form (col. 2, lines 6-45).

As to claim 27, see Bashaw col. 2, lines 6-8.

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As to claim 29, see Bashaw col. 4, lines 35-68.

As to claim 30, see Bashaw col. 3, lines 57-59 and col. 4, lines 21-29.

As to claim 31, Bashaw see Example 1.

As to claim 32, Bashaw discloses the surfactant is applied to the superabsorbent material when the superabsorbent material is in powder form, which the examiner interprets to be in a solvated state, as the copolymer is solubized in the solvent to form the powdered copolymer (col. 5, lines 23-27).

5. Claims 28, 33, 36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bashaw in view of Howe as applied to claims 22 and 34 above and further in view of Paul et al. USPN 6217890.

As to claim 28, Bashaw/Howe discloses the present invention substantially as claimed. However, Bashaw/Howe does not disclose the claimed group of materials. Paul discloses high absorbency materials in the claimed group as a natural alternative to synthetic high absorbency materials (col. 25, lines 25-40). Therefore, because the natural materials as disclosed in Paul are art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to

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substitute the natural materials for the synthetic material, such as maleic anhydride disclosed in the Bashaw reference.

As to claims 33 and 36, Bashaw/Howe discloses the paper product is highly absorbent (col. 7, lines 18-20). However, Bashaw/Howe does not specifically disclose the fiber in a disposable absorbent product as claimed. Paul discloses a similar treated superabsorbent material for use in a diaper comprising a liquid-permeable topsheet 22, a backsheet 20 attached to the topsheet, and an absorbent structure 24 made with a treated superabsorbent fiber positioned between the topsheet and the backsheet for the benefit of having highly absorbent material in a relatively thin absorbent article (Paul col. 24, line 52 through col. 25, line 52). It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the invention of Bashaw/Howe into a disposable absorbent article as claimed, since the invention of Bashaw/Howe provides a highly absorbent article, which both references teach is desired.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not



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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F. Stephens whose telephone number is (571) 272-4937. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jacqueline F Stephens  
Primary Examiner  
Art Unit 3761

March 19, 2007